

REMARKS

Claims 1-7 and 10-12 have been examined. New claims 13-18 have been added to further describe patentable aspects of the present invention. Claim 12 has been canceled without prejudice or disclaimer.

I. Election/Restriction Requirement

Claim 12 is subject to a restriction and/or election requirement. However, claim 12 is canceled. Therefore, the restriction requirement is moot.

II. Claim rejection under 35 U.S.C. § 112

Claims 1-7, 10 and 11 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. In particular, claim 1 recites “a clamp unit that clamps a potential difference between the first terminal and the second terminal, wherein the second terminal is not directly connected to the upper arm unit.” The Examiner asserts that there is insufficient antecedent basis for this limitation since it is not clear without a direct connection between the second terminal and the upper-arm unit how the high-voltage is supplied to the switching element in the upper arm unit from the second terminal. Thus, the Examiner construes this features as the second terminal being connected to the high-arm unit through a trace or a wire or a cable for supplying the high-voltage to the unit. In other words, it appears the Examiner construes the feature as the second terminal being directly connected to the upper arm unit. The Examiner’s interpretation is the exactly opposite to the claim language.

A person of ordinary skill in the art would readily understand that a “direct” connection between components in an electric circuit includes a connection with a wire, or the like. That is, there are no intervening components in between the connected components, or rather, in the

connecting path. A person of ordinary skill in the art would also readily understand that an “indirect” connection (i.e., not directly connected) is interpreted to mean that intervening components, such as a resistor, capacitor, diode, inductor, or the like, do exist between the connected components. Hence, the components are not directly connected to each other.

Turning to claim 1, claim 1 recites, *inter alia*, “a second terminal for supplying a high-voltage to the switching element in the upper arm unit; and a clamp unit that clamps a potential difference between the first terminal and the second terminal, wherein the second terminal is not directly connected to the upper arm unit.” The Examiner appears to interpret the second terminal as terminal VS in Figure 1 of the present application. If terminal VS was the second terminal referred to in the claims, the Examiner would appear to be correct. However, terminal VS is not the recited second terminal of claim 1. Thus, the amendment to claim 1, that the second terminal is not directly connected to the upper arm unit, was intended to distinguish this feature from the Examiner’s misinterpretation of the claim in view of Figure 1. That is, since claim 1 recites that the second terminal is not directly connected to the upper arm unit and terminal VS clearly is directly connected to the upper arm unit, then the second terminal of claim 1 must refer to a different terminal than terminal VS. For example, paragraph 19 of the present invention (see substitute specification) recites:

an upper-arm-driving high-voltage power-supply terminal VB connected to a high-voltage driving power-supply that drives the upper arm unit 4, and upper-arm-driving reference power-supply terminal VS that is a reference terminal of the driving power supply that drives the upper arm unit 4....

Accordingly, Figure 1 of the present invention clearly shows that terminal VB, for example, is not directly connected to the upper arm unit. Therefore, Applicants respectfully request the Examiner to withdraw this rejection in view of the above remarks.

III. Rejection under 35 U.S.C. § 102

Claims 1-7 and 10-11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Toshiyuki et al. (JP 10-042,575). Applicants traverse the rejection based on the following comments.

Claim 1 recites, *inter alia*, “a second terminal for supplying a high-voltage to the switching element in the upper arm unit; and a clamp unit that clamps a potential difference between the first terminal and the second terminal, wherein the second terminal is **not** directly connected to the upper arm unit.” The Examiner asserts that Toshiyuki discloses all the features of claim 1. In particular, the Examiner asserts that VS1 of Toshiyuki reads on the claimed second terminal. The Examiner also asserts that T1 reads on the claimed upper arm unit. However, Figure 1 of Toshiyuki clearly shows that VS1 is directly connected to terminal E1 (emitter terminal of the transistor T1), i.e., VS1 is directly connected to the upper arm of Toshiyuki. Therefore, Toshiyuki does not anticipate claim 1 because claim 1 requires that the second terminal is not directly connected to the upper arm unit.

Since Toshiyuki fails to disclose each and every feature of claim 1, claim 1 should be patentable for at least this reason.

Applicants submit that the remaining claims are patentable at least by virtue of their respective dependencies.

IV. New claims

By this Amendment, Applicants have added new claims 13-18 to further define the claimed invention. Applicants respectfully submit claims 13-18 recite additional features which are not taught or suggested by the prior art of record.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



Ryan F. Heavener
Registration No. 61,512

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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